

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
28 October 2004 (28.10.2004)

PCT

(10) International Publication Number
WO 2004/092505 A1

(51) International Patent Classification: **E04B 9/32**,
G09F 13/02, F21W 121/00, F21S 8/00

(21) International Application Number:
PCT/TT2004/000190

(22) International Filing Date: 8 April 2004 (08.04.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
FI2003U000039 16 April 2003 (16.04.2003) IT

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

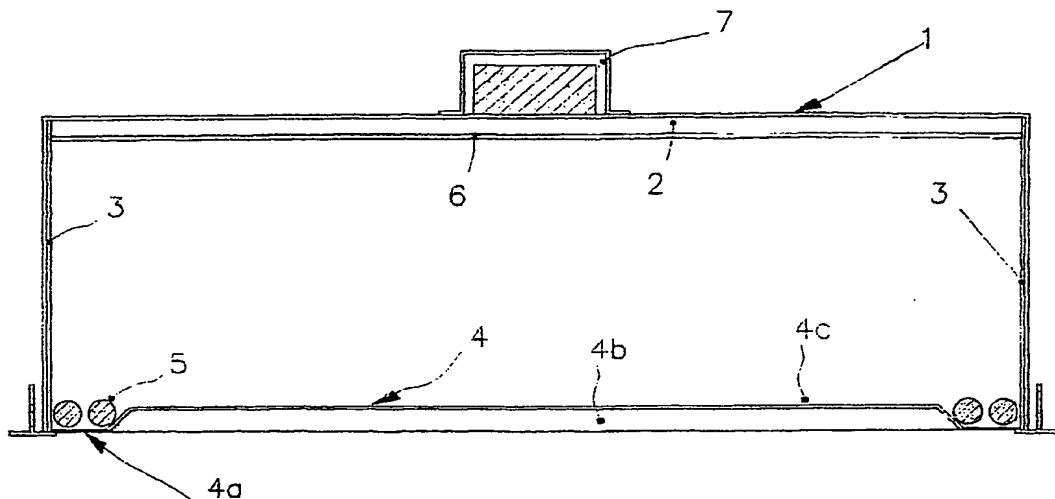
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: **EMBEDDED OR CEILING-FITTED ILLUMINATION DEVICE WITH BACK REPRODUCING DECORATIVE IMAGES**



(57) Abstract: An illumination device which comprises a box body (1) with a back (2) and with side walls (3) extending from said back, an opening (4b) having been formed on the wall (4) opposite said back while on the inner face of said back a decorative image (6) is reproduced. A light source extends internally on a frame (4a) delimiting said opening (4b) and the side walls (3) have inner faces made of reflective material.

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TITLE

JC20 Rec'd PCT/PTO 1 6 OCT 2005

EMBEDDED OR CEILING-FITTED ILLUMINATION DEVICE WITH BACK
REPRODUCING DECORATIVE IMAGES

DESCRIPTION

5 Scope of the Invention

The present invention generally concerns the field of interior illumination and more specifically refers to an embedded or ceiling-fitted illumination device on whose back decorative images are reproduced.

10 Description of the Background Art

The illumination of confined interiors, especially offices, work areas, exposition areas, transit or waiting rooms, may be achieved, among other methods, by devices embedded in the ceiling or walls or fitted on the ceiling.

15 Aside from possible aesthetic value obtained from the shape of the single devices, this type of illumination may result anonymous and even oppressive, especially in the presence of low ceilings or in rooms of small size.

For room personalisation, and also for the
20 presentation of advertising messages in public transit rooms, light panels reproducing decorative images and various message types are frequently used. Solutions of this type, whose primary function is not the illumination of the room, but rather the decoration or the transmission
25 of messages, foresee an opalescent panel on which an image is reproduced and a light source lying behind whose light spreads in a nearly uniform manner through the panel. Solutions of this type are essentially adapted for wall installation, and the images produced lack depth, which
30 render them unsuitable for installation in those rooms characterised by modest dimensions.

Object and Summary of the Invention

The object of the present invention is to provide an illumination device that creates the illusion of natural illumination coming from an external source, suggested through a decorative image, preferably (even if not
5 exclusively) of naturalistic subject.

This object is achieved with the illumination device according to the present invention which comprises a box body with a back and with side walls extending from said back, an opening having been made on the wall opposite
10 said back. On the inner face of said back a decorative image is reproduced, while a light source turned toward said back extends internally along a frame delimiting said opening, said side walls having reflective surfaces.

The illumination device according to the invention,
15 which may be used for both embedded ceiling or wall and ceiling-fitted installation, and also for fitting with equivalent modules, has the advantage of permitting the illumination of a room by creating the illusion that the light comes from a natural light source, the illusion
20 being accentuated by the sense of depth which the presence of the reflective side walls gives to the background image.

Brief Description of the Drawings

The invention will now be illustrated in greater
25 detail with the following description of one of its embodiments, given as a non-limiting example with reference to the attached drawings in which:

- Figure 1 is a schematic section view of an illumination device according to the invention in the
30 embedded version;

- Figure 2 is a schematic section view of an illumination device according to the invention in the

ceiling-fitted version;

- Figure 3 is a perspective view of the ceiling installation of the illumination device according to the invention;

5 - Figure 4 is a perspective view of the wall installation of a plurality of illumination devices according to the invention.

Detailed Description of the Invention

With reference to figures 1 and 2, a box-like body
10 of the illumination device according to the invention is indicated with 1. The body 1 is composed of a back wall 2, side walls 3 extending from the sides of the back wall 2 and from a front wall 4 extending from the side walls 3, opposite from the back wall 2. In the present embodiment
15 of the invention, the front wall 4 is formed by a perimetric frame 4a projecting inside the side walls 3 delimiting an opening 4b.

Inside the body 1, along the frame 4a, a tubular, florescent light source 5 is arranged, providing a
20 substantially uniform irradiation along the perimetric extension of the frame 4a. This last has a raised edge 4c to hide the light source 5 from outside view. On the inner face of the walls of back 2 a decorative image 6 is reproduced, for example of naturalistic type such as the
25 image of a clear sky, a mountainous or marine landscape, or in any case images characterised by their intrinsic luminosity or ability to suggest the sensation of natural light. The internal faces of the side walls 3 are made of reflective material in order to exalt the depth of the
30 transmitted image. The image may be printed on a flexible panel, for example a plastic or paper film, and applied directly to the back wall 2, or it may be reproduced on a

rigid panel, to be fastened to the back wall at a certain distance, also to allow the interposition of the power supply means 7 which are otherwise placed outside of the back 2.

5 The above-described illuminating device may be equipped with means which permit the embedded connection in a ceiling or wall or ceiling-fitting. These means, being of known type, are not illustrated in detail. The illumination device according to the invention may be used
10 on its own or in combination with other equivalent devices to form illuminating surfaces with natural backgrounds as illustrated in figure 3. In particular, embodiments may also be foreseen in which each illumination device according to the invention constitutes a module of a
15 complex composition, in which the background image present in each device is only a fraction of a larger image which forms and is visible only after all illumination devices have been installed, by appropriately combining them with respect to each other. One example of complex image
20 composition by way of the illumination devices according to the invention is illustrated in figure 4.

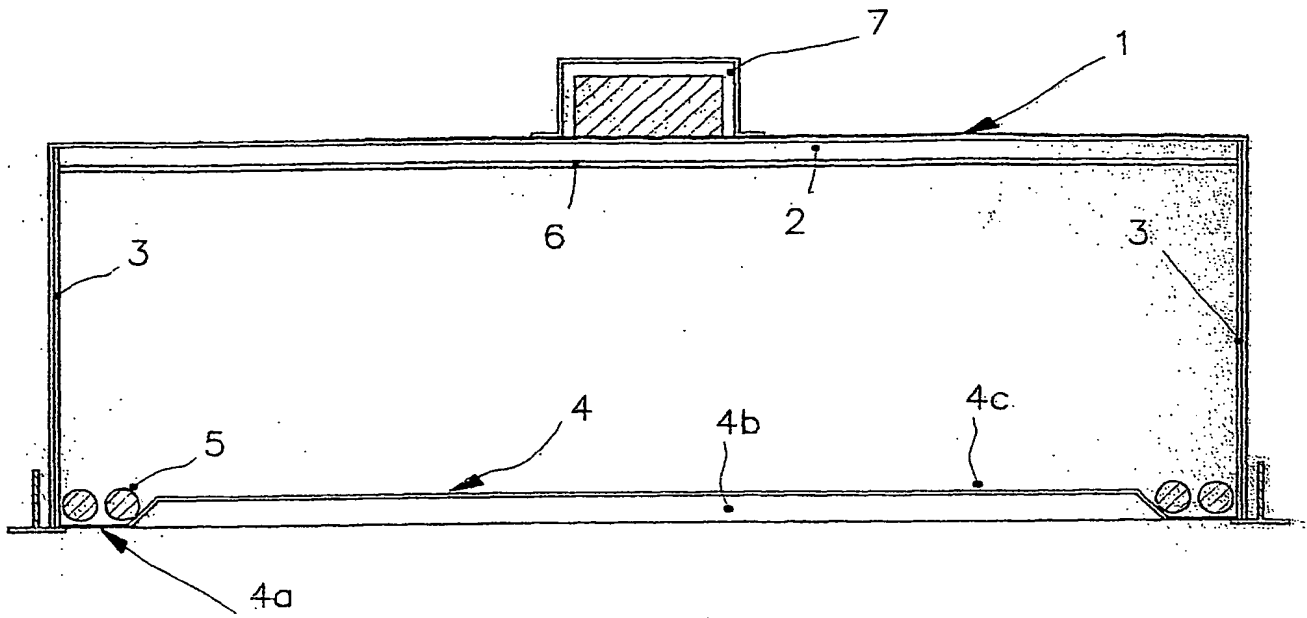
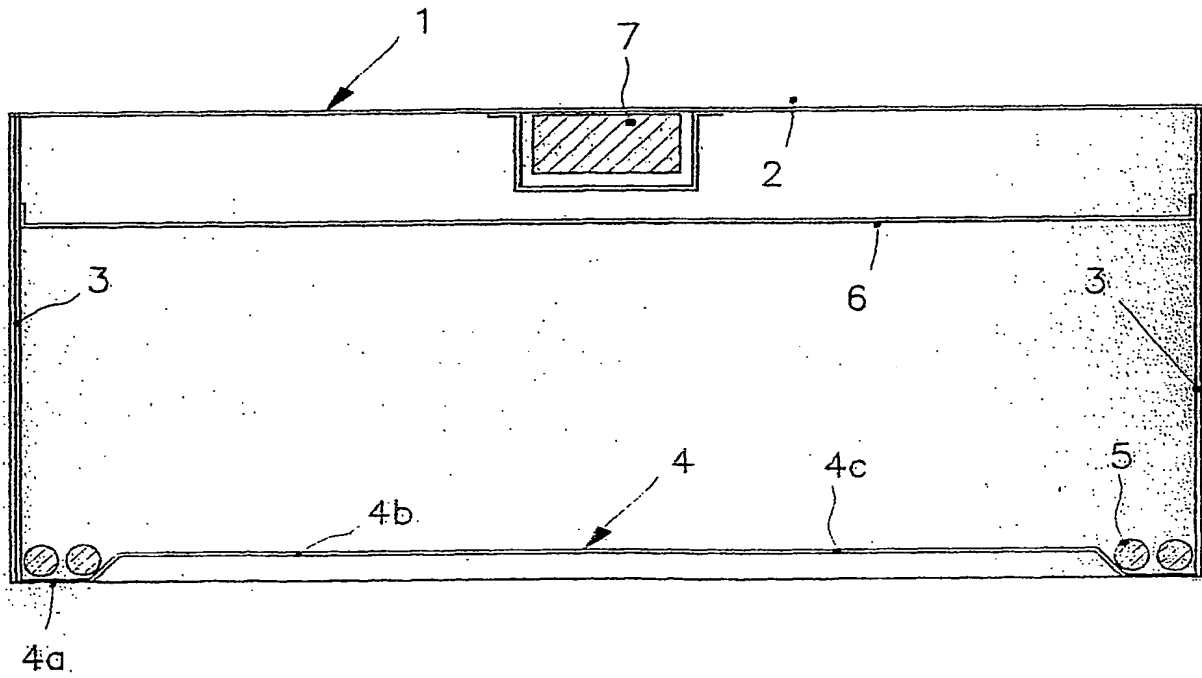
 It shall be clear from the above that, even if the primary object of the present invention is to provide an illumination device which gives the sensation of natural
25 luminosity through the association with naturalistic images, the same device may also be associated with any other type of decorative image, comprising advertising messages, as long as it is equipped with its own intrinsic luminosity. In fact, the sense of depth conferred to the
30 image, due to the structure of the illumination device according to the invention, permits the use of the device in applications where traditional light panels are not

recommended.

CLAIMS

1. Illumination device comprising a box-like body with a back and side walls extending from said back, an opening having been formed on the wall opposite said back, characterised in that on the inner face of said back a decorative image is reproduced, a light source extending internally on a frame delimiting said opening, said side walls having inner faces made of reflective material.
2. Illumination device according to claim 1, in which said light source is of type distributed along the length of said frame.
3. Illumination device according to claim 2, in which said light source is of the fluorescent type.
4. Illumination device according to any one of the preceding claims, in which said decorative image reproduced on its back is a fraction of a larger image, which may be composed by combining several devices in a modular configuration.
5. Illumination device according to any one of the preceding claims, in which means for embedded ceiling or wall connection are foreseen.
6. Illumination device according to any one of the claims 1-4, in which means of ceiling-fitted connection are foreseen.

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Fig. 1Fig. 2

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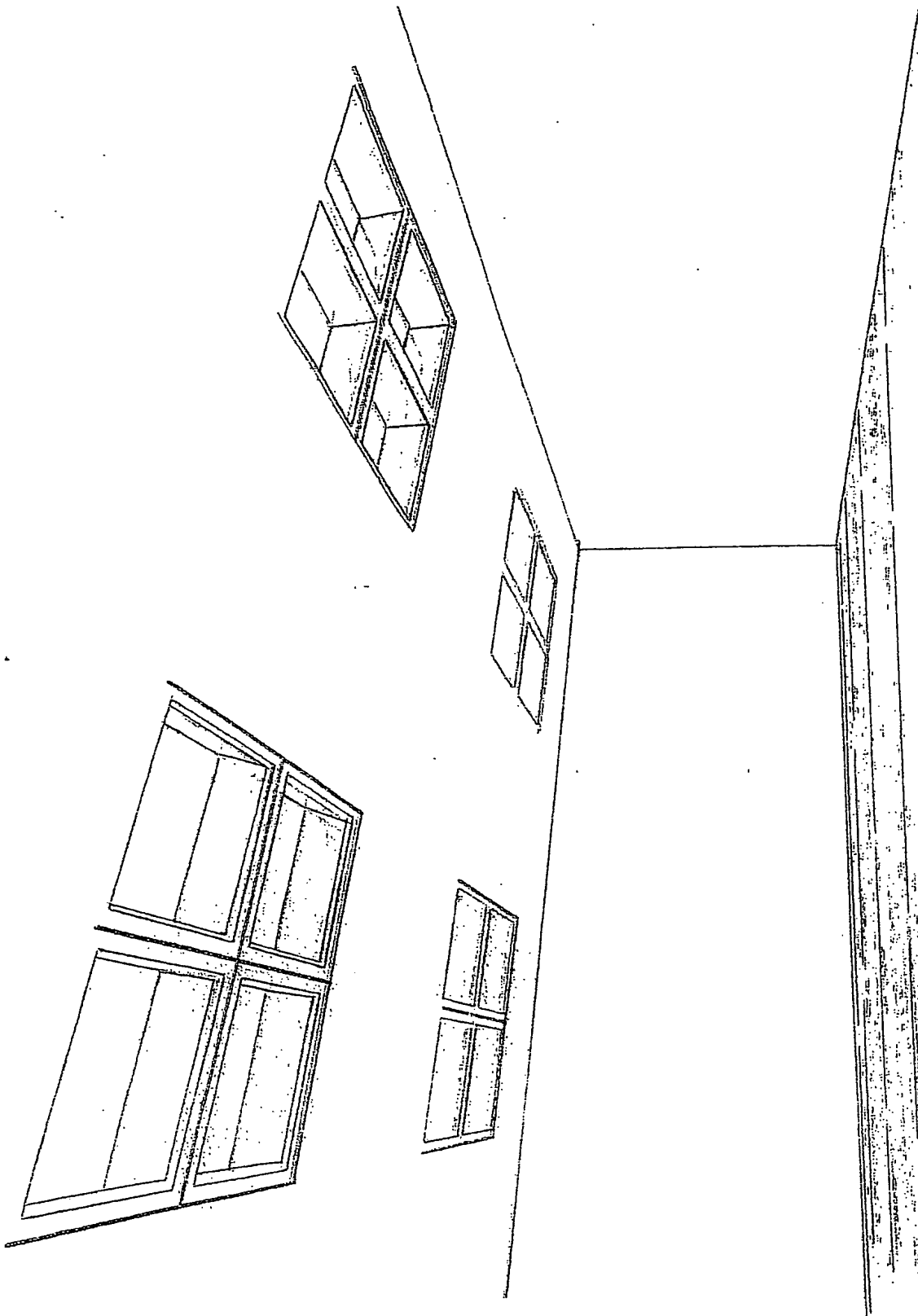


Fig. 3

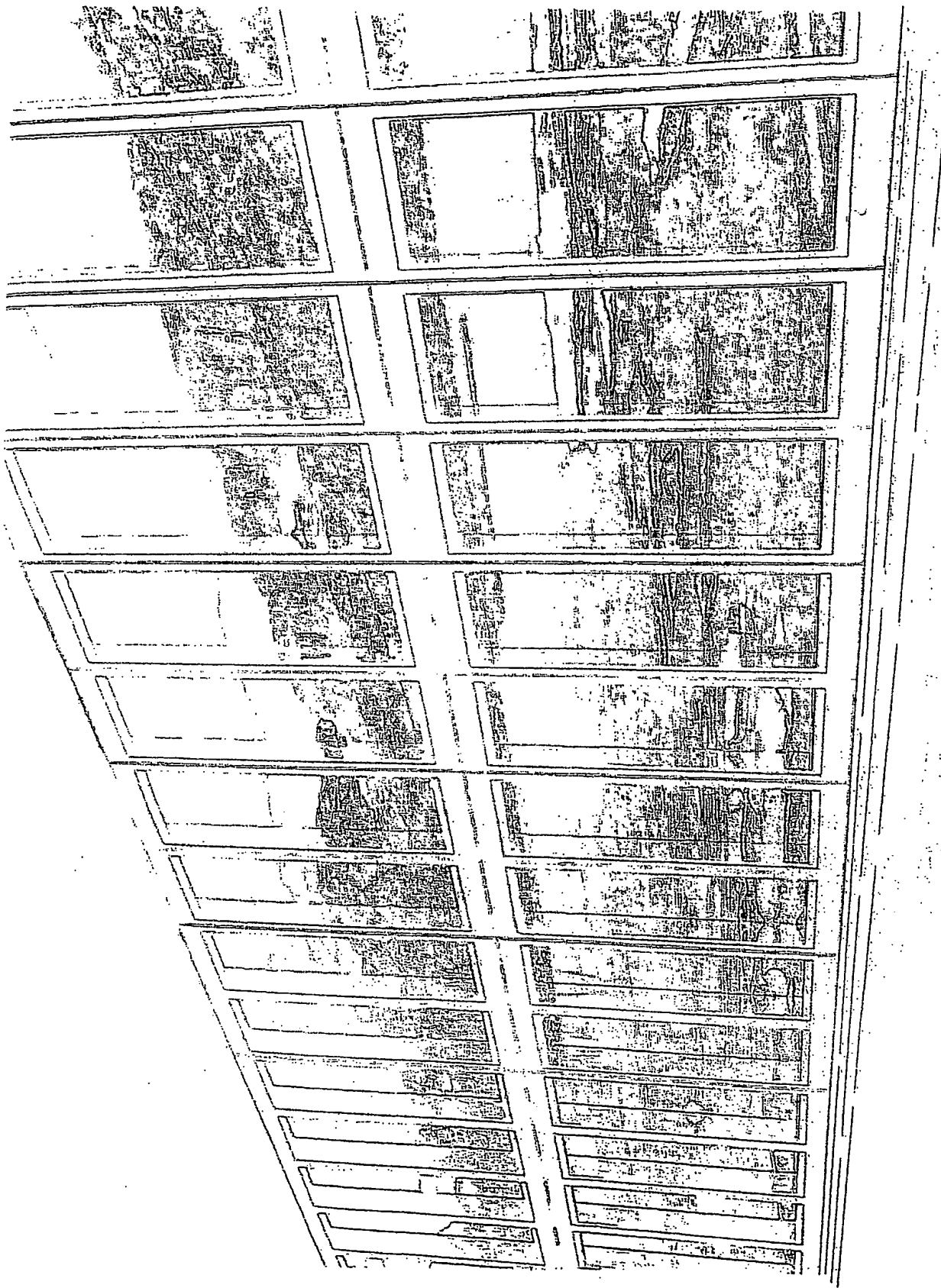


Fig. 4